CELLULAR TELECOMMUNICATIONS & INTERNET ASSOCIATION

800 MHz User Coalition

Presentation to

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800 MHz USER COALITION

- The wireless industry remains committed to working with Public Safety and the other licensees in the 800 MHz band to address the ultimate goal of this proceeding – resolution of interference problems.

- Over 30 signatories, including representatives from Public Safety, electric, gas and water utilities, business and industrial users, non-Nextel EA General Category Auction licensees, incumbent SMR licensees operating on General Category channels, equipment manufacturers, and CMRS licensees have signed on to the Coalition Proposal.

THE JOINT COMMENTERS' PROPOSAL IS NOT WORKABLE

- The proposal is too complex:
  - Numerous working parts over almost four year period.
- The proposal lacks adequate funding:
  - NextWave-type installment mechanism, 3% percent downpayment on its pledge.
  - Many doubt that Nextel's estimates are realistic. If money runs out, unfinished relocation could exacerbate problem.
- The proposal suffers from legal infirmities:
  - Illegal under section 309 (j) of the Communications Act.

THE 800 MHz USER COALITION PROPOSAL PROVIDES A BETTER SOLUTION

- The premise of the 800 MHz User Coalition proposal is that something must be done in the near term to address interference that is more immediate, more effective, less disruptive and less costly than the "Consensus Plan."
- The proposal is based on a common sense approach that focuses first on mitigating existing interference problems *and* preventing future interference, instead of jumping to a "solution" that would disrupt 100% of Public Safety systems.
- The proposal relies on enhanced mitigation techniques that build upon, but go beyond, existing "best practices."

STATEMENT OF PRINCIPLES FOR ADDRESSING 800 MHz INTERFERENCE

- Step 1 - solve interference through mandated mitigation using enhanced best practices, including:
  - Pro-active steps to identify and avoid interference
  - Codification of policy that entities creating interference must mitigate interference within 60 days of being contacted
  - Non-Public Safety 800 MHz licensees would provide engineering expertise to Public Safety
  - All 800 MHz licensees should participate in working toward solutions
  - FCC should adopt modified technical rules to prevent future interference
  - FCC should allow more flexibility for private market agreements such as frequency swaps

STATEMENT OF PRINCIPLES FOR ADDRESSING 800 MHz INTERFERENCE

- Step 2 - initiate a review to assess progress and effects of Step 1 mitigation measures, and to evaluate longer-term measures that might prove necessary *if and only if* these mitigation techniques and rule changes do not adequately resolve interference.
  - Review coordinated by an independent agent, working with a steering committee including all affected stakeholders.
  - Review initiated immediately, focusing first on monitoring and evaluating the track record of the enhanced best practices approach in resolving interference concerns.
  - Review to include recommendations on any broader solutions that might prove necessary *if* interference is not sufficiently mitigated, as well as on funding of any appropriate remediation measures.
  - Remediation measures should be limited if mitigation is as successful as anticipated.

PROPOSED PROCEDURES FOR INTERFERENCE MITIGATION

I. Procedures to identify *and avoid* interference in the 806-824/851-869 MHz band:

- Licensees installing any new low-site antennas in the 851-869 MHz band shall notify co- and adjacent channel licensees and appropriate frequency coordinators 30 days in advance of installation of the following information:
  - Point of contact information
  - Site coordinates
  - Certification of engineering analysis

PROPOSED PROCEDURES FOR INTERFERENCE MITIGATION

II. Procedures to address *identified* interference problems:

- A 806-824/851-869 MHz licensee receiving interference will immediately notify any suspected interfering low-site system operator or operators of the problem by:
  - Posting the interference complaint to an e-mail address, identifying the specific geographic location where interference is occurring.
- All licensees receiving notice of complaint via the website shall respond within two business days, confirming whether they have systems operating within 5,000 feet.
- An on-site engineering analysis including all potentially responsible contributors and the complainant will take place within five business days.

PROPOSED PROCEDURES FOR INTERFERENCE MITIGATION

III. Procedures to address identified interference problems (cont.):

- Mitigation steps
  - The contributors to the interference identified in the engineering analysis shall correct the interference using industry-standard mitigation techniques.
  - When changes can be easily reversed or substantially modified, then the contributor making the change shall coordinate both with the other contributors and the complaining entity before making changes.
  - If the analysis finds that interference is caused by something other than the equipment belonging to potential contributor system operators, the owner of the equipment shall be responsible for mitigating the interference.
- The Complainant shall have a duty to cooperate in the implementation of the most cost-effective solution.
- If an agreement between the parties is not reached within 60 calendar days after receipt of the written notice of interference, any affected party may submit the matter to the FCC for resolution.

TECHNICAL RULE MODIFICATIONS

- The FCC should adopt the following technical rules as part of the effort to resolve interference through improved mitigation techniques:
  - Require Licensees in the 806-824/851-869 MHz band to calculate percentage degradation by using the TSB-88 algorithm.
  - Codify or amend the regulations as necessary to allow for external filtering and other added equipment to reduce interference.
  - Adopt the "APCO Best Practices" recommendation to require that user receiver equipment in the 806-824/851-869 MHz band provide a minimum 75 dB intermodulation specification.
  - Require licensees of "low-site" systems in the 806-824/851-869 MHz band to limit the ERP of base stations with an antenna height of 30 meters or less above ground to 100 watts/25 kHz channel.
  - All base station operations in the 806-824/851-869 MHz band should be subject to a single rules selection concerning emission restrictions.
  - Establish adjacent channel spacing standards for use in coordinating non-EA channels.

TECHNICAL RULE MODIFICATIONS

- Any interference that should remain after the implementation of the above measures could be resolved through "Enhanced Best Practices" measures such as careful design or redesign of antenna systems, filters, and other non-transmitter-specific remedies.
  - Motorola is testing the use of switchable attenuators in portable receivers to reduce the strength signals entering the receiver in strong signal areas
  - Motorola is also testing software-controlled tunable filters in their portable receivers that retune the filter based on received signal strength